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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/314,052 05/18/99 OTT

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EXAMINER

THOMPSON, M	
ART UNIT	PAPER NUMBER

3763
DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/314,052

Applicant(s)

OTT ET AL.

Examiner

Michael M. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 19-23, 38 and 55-71 is/are pending in the application.
- 4a) Of the above claim(s) 39-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 19-23, 38 and 55-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12, 19-23, and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 recites the limitation "the outlet" in section a, line 2,3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 12, 19-23, 38, 55-64, 70, and 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Ott et al. (US Patent No. 5,411,474). Ott et al. teaches an apparatus for treating a gas comprising a housing defining one chamber having an entry port and an exit port, the chamber that contains a volume of liquid in fluid communication with the insufflator, a humidifying means, a container/reservoir, the device comprising an opening, and a port for filling the container/reservoir, and at least one layer of filter/membrane in the chamber for

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filtering the gas, water retaining layers and the pre-charging of those layers. He teaches the use of DC power, humidity sensing means and monitoring means (column 10) to sense and monitor the relative humidity of the gas and act accordingly to maintain that humidity and/or temperature. Ott et al. teaches the use of capacitors and resistors for the humidity sensing means, an operational amplifier, a control means for controlling electrical power, all allowing for simultaneous heating and hydration. In Figure 3, shows a concentric circle configuration for the electrical resistive wire that makes up the heating means. (Please review columns 5-10 of the Ott patent.) Please note that it is the Examiner's position that most electrical cable is insulated.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6-11, and 65-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ott et al in view of Absten. Ott et al. teaches all of the limitations of the claims except for a microcontroller, an alarm means that is audible or visual, a plurality of water-retaining layers, an AC/DC converter, an electrical housing for monitoring means, and an insulated cable with removable connector. Absten teaches a microcontroller that will "typically" be used to monitor the pressure of the gas, thereby rendering it capable of monitoring humidity levels of gas. Absten also teaches an alarm mechanism that, "may take the form of an internal 'alarm' in which pressure (for example) would be measured but not displayed for the operator unless problems are

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detected.”(column 5, line 29-32) It would have been obvious to one of ordinary skill in the art, at the time of invention, to combine the modified apparatus of Ott et al. with the microprocessor of Absten to monitor the level of humidity of the gas for the purpose of indicating when the gas drops below a preset, critical relative humidity threshold or to allow for the activation of an alarm. It also would have been obvious to combine an alarm mechanism as taught by Absten to the modified apparatus of Ott et al to notify the user of any “problems that are detected.” Please note it would be obvious to make an “alarm” of either audio or visual construction to effectively notify a user of problems. It would also be obvious to add an AC/DC converter to make the power source to the apparatus more versatile in differing environments. It is further obvious to contain a monitoring and/or sensing means in an electrical housing to eliminate electrocution, including the usage of an insulated electrical cable with removable connector for the prevention of electrocution and versatility. Please note that it is the Examiner’s position that backup containers/reservoir for additional liquid would be well known in the art and/or simply a duplication of parts to provide an abundance of liquid to be humidified in the event that a medical procedure may take an extended amount of time, to ensure that there is a sufficient amount of liquid to last the entire procedure.

8. Claim 6 is rejected since Ott et al. teaches all the limitations of the claims except for comprising a plurality of water-retaining layers, the humidity sensing means being disposed in the chamber downstream of the heating means. It would have been obvious to one having ordinary skill in the art, at the time of invention, to add a plurality of water retaining layers to the invention of Ott et al. since it has been held that mere duplication of the essential working parts

of a device involves only routine skill in the art. The addition of a plurality of water-retaining layers would increase the quality of filtering, and/or humidification.

9. In case Applicant doesn't agree that column 10 of the Ott et al. patent clearly indicates the use of a humidity sensing means downstream of the heating means, it would have been an obvious matter of design choice as disclosed by Ott et al to dispose the humidity sensing means in the chamber downstream of the heating means. Ott et al teaches placing of the heat sensing means downstream of the heating means, therefore placing the humidity sensing means downstream of the heating means would be an obvious design choice in obtaining more accurate information of the gas exiting the chamber.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-5, 12, 19-23, 38, 55-64, 70, and 71 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 5,411,474. Although the conflicting claims are not identical, they are not patentably distinct from each other because it is the Examiner's position that these claims are substantially

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similar in teaching teaches an apparatus for treating a gas comprising a housing defining one chamber having an entry port and an exit port, the chamber that contains a volume of liquid in fluid communication with the insufflator, a humidifying means, a container/reservoir, the device comprising an opening, and a port for filling the container/reservoir, and at least one layer of filter/membrane in the chamber for filtering the gas, water retaining layers and the pre-charging of those layers. It teaches the use of DC power, humidity sensing means and monitoring means (column 10) to sense and monitor the relative humidity of the gas and act accordingly to maintain that humidity and/or temperature. Ott et al. teaches the use of capacitors and resistors for the humidity sensing means, an operational amplifier, a control means for controlling electrical power, all allowing for simultaneous heating and hydration.

12. Claims 1-6, 12, 19-23, 38, 55-65, 70, and 71 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of U.S. Patent No. 6,068,609. Although the conflicting claims are not identical, they are not patentably distinct from each other because the both teach teaches an apparatus for treating a gas comprising a housing defining one chamber having an entry port and an exit port, the chamber that contains a volume of liquid in fluid communication with the insufflator, a humidifying means, a container/reservoir, the device comprising an opening, and a port for filling the container/reservoir, and at least one layer of filter/membrane in the chamber for filtering the gas, water retaining layers and the pre-charging of those layers. He teaches the use of DC power, humidity sensing means and monitoring means (column 10) to sense and monitor the relative humidity of the gas and act accordingly to maintain that humidity and/or temperature. Ott et al. teaches the use of capacitors and resistors for the humidity sensing means, an operational

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amplifier, a control means for controlling electrical power, all allowing for simultaneous heating and hydration.

Response to Arguments

13. Applicant's arguments filed 07-30-2001 have been fully considered but they are not persuasive. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

14. Applicant has not specifically addressed the limitations of the independent claims or specifically addressed particular claims and the limitations contained therein. It is the Examiner's position that in the least, the independent claims are still rejected under the prior art of record. It appears that Applicant has addressed an issue related to capacitors or resistors directed to the directly monitor the relative humidity of gas being humidified. These arguments appear to be directed to claims 22 and 23. The Examiner would argue that Ott et al. ('474) in the least inherently teaches sensing the humidity of a gas. Ott et al teaches several other sensing devices for pressure, temperature and volumetric flow which clearly parallel sensing humidity since volumetric flow to and from the chamber in combination with the pressure and temperature will inherently control the humidity as controlled in Ott et al. by keeping the temperature within 2 degrees Celsius which is inherently teaching the sensing and controlling of humidity. The flow, pressure and especially temperature will provide an environment for humidity. The capacitance and resistance systems are related to the temperature control. A temperature suitable for heating a flow stream will produce and control the relative humidity in the chamber and

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consequently the gas that is infused into the patient. With respect to the obvious type double-patenting rejections the Examiner maintains that in the least the independent claims are suitably rejected. However, since Applicant has failed to specifically point out which claims are not suitably rejected and which claims are suitably rejected under obvious type double patenting the Examiner is unable to specifically address these issues. Furthermore, Applicant has failed to address the rejection raised under 35 U.S.C. 112, second paragraph, therefore this office action has been made final.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael Thompson whose telephone number is (703) 305-1619. The Examiner can normally be reached on Monday through Friday from 9 am to 5 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Primary, AnhTuan Nguyen, can be reached on (703) 308-2154. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4520.

Michael M. Thompson

Patent Examiner

MT 

October 3, 2001


ANH TUAN T. NGUYEN
PRIMARY EXAMINER

10/9/01